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Bih-Yuan Ku;
Rail Conference, 2003. Proceedings of the 2003 IEEE/ASME Joint
22-24 April 2003 Page(s):191 - 197
[AbstractPlus](#) | Full Text: [PDF](#)(945 KB) IEEE CNF
- ☐ 2. **FE-I2: a front-end readout chip designed in a commercial 0.25- μ m process for the ATLAS pixel detector at LHC**
Blanquart, L.; Richardson, J.; Einsweiler, K.; Fischer, P.; Mandelli, E.; Meddeler, G.; Peric, I.;
Nuclear Science, IEEE Transactions on
Volume 51, Issue 4, Part 1, Aug. 2004 Page(s):1358 - 1364
Digital Object Identifier 10.1109/TNS.2004.832895
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(368 KB) IEEE JNL
- ☐ 3. **Digital implementation of a line current shaping algorithm for three phase high power factor boost rectifier without input voltage sensing**
Chattopadhyay, S.; Ramanarayanan, V.;
Power Electronics, IEEE Transactions on
Volume 19, Issue 3, May 2004 Page(s):709 - 721
Digital Object Identifier 10.1109/TPEL.2004.826494
[AbstractPlus](#) | Full Text: [PDF](#)(960 KB) IEEE JNL
- ☐ 4. **A Voltage-sensorless control method to balance the input currents of a three-wire boost rectifier under unbalanced input Voltages condition**
Chattopadhyay, S.; Ramanarayanan, V.;
Industrial Electronics, IEEE Transactions on
Volume 52, Issue 2, April 2005 Page(s):386 - 398
Digital Object Identifier 10.1109/TIE.2005.843917
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(752 KB) IEEE JNL
- ☐ 5. **Real-time emulation for power equipment development. I. Real-time simulation**
Jack, A.G.; Atkinson, D.J.; Slater, H.J.;
Electric Power Applications, IEE Proceedings-
Volume 145, Issue 2, March 1998 Page(s):92 - 97
[AbstractPlus](#) | Full Text: [PDF](#)(552 KB) IEE JNL
- ☐ 6. **Evaluation and integrated diagnostic of high speed narrow band power-line chipset**
Bmiller, G.;
Power Line Communications and Its Applications, 2005 International Symposium on
6-8 April 2005 Page(s):371 - 375
Digital Object Identifier 10.1109/ISPLC.2005.1430533
[AbstractPlus](#) | Full Text: [PDF](#)(1822 KB) IEEE CNF

- ☐ **7. Co-design of emulators for power electric processes using SpecC methodology**
Saoud, S.B.; Gajski, D.D.; Gerstlauer, A.;
IECON 02 [Industrial Electronics Society, IEEE 2002 28th Annual Conference of the]
Volume 3, 5-8 Nov. 2002 Page(s):2143 - 2148 vol.3
[AbstractPlus](#) | Full Text: [PDF](#)(446 KB) IEEE CNF

- ☐ **8. Parallel architectures applied real time emulation [of power apparatus]**
Ben Saoud, S.; Hapiot, J.C.;
Industrial Electronics Society, 2000. IECON 2000. 26th Annual Conference of the IEEE
Volume 3, 22-28 Oct. 2000 Page(s):1719 - 1724 vol.3
Digital Object Identifier 10.1109/IECON.2000.972535
[AbstractPlus](#) | Full Text: [PDF](#)(574 KB) IEEE CNF

- ☐ **9. Variable input biasing as applied to pulse response testing of digital integrated circuits**
Pour-Mozafari, S.; Beasley, J.; Steine, R.;
Circuits and Systems, 1999. 42nd Midwest Symposium on
Volume 1, 8-11 Aug. 1999 Page(s):341 - 342 vol. 1
Digital Object Identifier 10.1109/MWSCAS.1999.867275
[AbstractPlus](#) | Full Text: [PDF](#)(168 KB) IEEE CNF

- ☐ **10. Real time emulator of static converters/electrical machines application to the test of control unit**
Ben Saoud, S.; Dagues, B.; Schneider, H.; Metz, M.; Hapiot, J.C.;
Industrial Electronics, 1996. ISIE '96., Proceedings of the IEEE International Symposium on
Volume 2, 17-20 June 1996 Page(s):856 - 861 vol.2
Digital Object Identifier 10.1109/ISIE.1996.551055
[AbstractPlus](#) | Full Text: [PDF](#)(508 KB) IEEE CNF

- ☐ **11. Electronic controlled device for the analysis and design of photovoltaic systems**
Sanchis, P.; Lopez, J.; Ursua, A.; Marroyo, L.;
Power Electronics Letters, IEEE
Volume 3, Issue 2, June 2005 Page(s):57 - 62
Digital Object Identifier 10.1109/LPEL.2005.851314
[AbstractPlus](#) | Full Text: [PDF](#)(744 KB) IEEE JNL

- ☐ **12. Technical Control of the Digital Transmission Facilities of the Defense Communications System**
Jankauskas, L.; Landesberg, M.; Spector, D.; Meyer, C.;
Communications, IEEE Transactions on [legacy, pre - 1988]
Volume 28, Issue 9, Part 1, Sep 1980 Page(s):1516 - 1523
[AbstractPlus](#) | Full Text: [PDF](#)(840 KB) IEEE JNL

- ☐ **13. Digital phased array beamforming using single-bit delta-sigma conversion with non-uniform oversampling**
Kozak, M.; Karaman, M.;
Ultrasonics, Ferroelectrics and Frequency Control, IEEE Transactions on
Volume 48, Issue 4, July 2001 Page(s):922 - 931
Digital Object Identifier 10.1109/58.935709
[AbstractPlus](#) | Full Text: [PDF](#)(1684 KB) IEEE JNL

- ☐ **14. The virtual microscope**
Catalyurek, U.; Beynon, M.D.; Chialin Chang; Kurc, T.; Sussman, A.; Saltz, J.;
Information Technology in Biomedicine, IEEE Transactions on
Volume 7, Issue 4, Dec. 2003 Page(s):230 - 248
Digital Object Identifier 10.1109/TITB.2004.823952
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(1003 KB) IEEE JNL

- ☐ **15. A digital control of a single-phase UPS inverter for robust AC-voltage tracking**
Woo, Y.T.; Kim, Y.C.;
Industrial Electronics Society, 2004. IECON 2004. 30th Annual Conference of IEEE
Volume 2, 2-6 Nov. 2004 Page(s):1623 - 1628 Vol. 2
Digital Object Identifier 10.1109/IECON.2004.1431824
[AbstractPlus](#) | Full Text: [PDF](#)(1976 KB) IEEE CNF

- ☐ **16. Electronic converter for the analysis of photovoltaic arrays and inverters**
Sanchis, P.; Echeverria, I.; Ursua, A.; Alonso, O.; Gubia, E.; Marroyo, L.;
Power Electronics Specialist Conference, 2003. PESC '03. 2003 IEEE 34th Annual
Volume 4, 15-19 June 2003 Page(s):1748 - 1753 vol.4
Digital Object Identifier 10.1109/PESC.2003.1217720
[AbstractPlus](#) | Full Text: [PDF](#)(1003 KB) IEEE CNF
- ☐ **17. Embedded software in digital AM-FM chipset**
Sarlotté, M.; Candaele, B.; Quevremont, J.; Merel, D.;
Design, Automation and Test in Europe Conference and Exhibition, 2003
2003 Page(s):340 - 341
Digital Object Identifier 10.1109/DATE.2003.1253631
[AbstractPlus](#) | Full Text: [PDF](#)(226 KB) IEEE CNF
- ☐ **18. Tutorial: polarization mode dispersion impairment in lightwave transmission systems**
Kogelnik, H.; Nelson, L.E.; Jopson, R.M.;
Optical Fiber Communication Conference and Exhibit, 2002. OFC 2002
17-22 Mar 2002 Page(s):194
Digital Object Identifier 10.1109/OFC.2002.1036300
[AbstractPlus](#) | Full Text: [PDF](#)(205 KB) IEEE CNF
- ☐ **19. Design of real-time emulators of electromechanical systems**
Saoud, S.B.; Gajski, D.D.;
Power System Technology, 2002. Proceedings. PowerCon 2002. International Conference on
Volume 2, 13-17 Oct. 2002 Page(s):828 - 833 vol.2
Digital Object Identifier 10.1109/ICPST.2002.1047515
[AbstractPlus](#) | Full Text: [PDF](#)(653 KB) IEEE CNF
- ☐ **20. Bypassing the CAMAC data bus to read out FERA data at higher rates**
Siegel, S.; Vaquero, J.J.; Seidel, J.; Gandler, W.R.; Green, M.V.;
Nuclear Science Symposium, 1998. Conference Record. 1998 IEEE
Volume 3, 8-14 Nov. 1998 Page(s):1461 - 1462 vol.3
Digital Object Identifier 10.1109/NSSMIC.1998.773820
[AbstractPlus](#) | Full Text: [PDF](#)(160 KB) IEEE CNF
- ☐ **21. An ultrasound beamformer using oversampling**
Freeman, S.R.; Quick, M.K.; Morin, M.A.; Anderson, R.C.; Desilets, C.S.; Linnenbrink, T.E.;
O'Donnell, M.;
Ultrasonics Symposium, 1997. Proceedings., 1997 IEEE
Volume 2, 5-8 Oct. 1997 Page(s):1687 - 1690 vol.2
Digital Object Identifier 10.1109/ULTSYM.1997.663335
[AbstractPlus](#) | Full Text: [PDF](#)(424 KB) IEEE CNF
- ☐ **22. A real-time TMS320C40 based parallel system for high rate digital signal processing**
Chen, D.C.-C.; Price, R.H.;
Acoustics, Speech, and Signal Processing, 1991. ICASSP-91., 1991 International Conference
on
14-17 April 1991 Page(s):1573 - 1576 vol.3
Digital Object Identifier 10.1109/ICASSP.1991.150549
[AbstractPlus](#) | Full Text: [PDF](#)(464 KB) IEEE CNF
- ☐ **23. A novel fuzzy logic controller for maximum power extraction from a PV array driving a three-phase induction motor**
Altas, I.H.; Sharaf, A.M.;
Electrotechnical Conference, 1994. Proceedings., 7th Mediterranean
12-14 April 1994 Page(s):853 - 856 vol.2
Digital Object Identifier 10.1109/MELCON.1994.380968
[AbstractPlus](#) | Full Text: [PDF](#)(284 KB) IEEE CNF
- ☐ **24. 3-D wafer scale architectures for neural network computing**
Campbell, M.L.; Toborg, S.T.;
Components, Hybrids, and Manufacturing Technology, IEEE Transactions on [see also IEEE
Trans. on Components, Packaging, and Manufacturing Technology, Part A, B, C]
Volume 16, Issue 7, Nov. 1993 Page(s):646 - 655
Digital Object Identifier 10.1109/33.257870



25. Simulation of the New York Power Pool for dispatcher training

Wang, N.; Cheung, R.; Wu, G.; Naccarino, J.; Castle, J.;

Power Systems, IEEE Transactions on

Volume 9, Issue 4, Nov. 1994 Page(s):2063 - 2072

Digital Object Identifier 10.1109/59.331470

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1 [High-level power estimation \(invited talks\): Source code optimization and profiling of energy consumption in embedded systems](#)

Tajana Šimunić, Luca Benini, Giovanni De Micheli, Mat Hans

September 2000 **Proceedings of the 13th international symposium on System synthesis**

Full text available:  [pdf\(81.88 KB\)](#)


Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

This paper presents a source code optimization methodology and a profiling tool that have been developed to help designers in optimizing software performance and energy in embedded systems. Code optimizations are applied at three levels of abstraction: algorithmic, data and instruction-level. The profiler exploits a cycle-accurate energy consumption simulator [3] to relate the embedded system energy consumption and performance to the source code. Thus, it can be used for analysis (i.e., to find ...

2 [Power optimization of variable voltage core-based systems](#)

Inki Hong, Darko Kirovski, Gang Qu, Miodrag Potkonjak, Mani B. Srivastava

May 1998 **Proceedings of the 35th annual conference on Design automation**

Full text available:  [pdf\(435.37 KB\)](#)

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The growing class of portable systems, such as personal computing and communication devices, has resulted in a new set of system design requirements, mainly characterized by dominant importance of power minimization and design reuse. We develop the design methodology for the low power core-based real-time system-on-chip based on dynamically variable voltage hardware. The key challenge is to develop effective scheduling techniques that treat voltage as a variable to be determined, in addition ...

Keywords: emulation, functional simulation, reconstruction, visibility

3 [Dynamic power management for portable systems](#)

Tajana Simunic, Luca Benini, Peter Glynn, Giovanni De Micheli

August 2000 **Proceedings of the 6th annual international conference on Mobile computing and networking**

Full text available:  [pdf\(970.60 KB\)](#)


Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Portable systems require long battery lifetime while still delivering high performance. Dynamic power management (DPM) policies trade off the performance for the power consumption at the system level in portable devices. In this work we present the time-indexed SMDP model (TISMDP) that we use to derive optimal policy for DPM in portable systems. TISMDP model is needed to handle the non-exponential user request interarrival times we observed in practice. We use our policy to control power co ...

4 System-level power optimization: techniques and tools

Luca Benini, Giovanni de Micheli

April 2000 **ACM Transactions on Design Automation of Electronic Systems (TODAES)**,
Volume 5 Issue 2



Full text available:  [pdf\(385.22 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This tutorial surveys design methods for energy-efficient system-level design. We consider electronic systems consisting of a hardware platform and software layers. We consider the three major constituents of hardware that consume energy, namely computation, communication, and storage units, and we review methods of reducing their energy consumption. We also study models for analyzing the energy cost of software, and methods for energy-efficient software design and compilation. This survey ...

5 Policy optimization for dynamic power management

G. A. Paleologo, L. Benini, A. Bogliolo, G. De Micheli

May 1998 **Proceedings of the 35th annual conference on Design automation**

Full text available:  [pdf\(239.25 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)
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Dynamic power management schemes (also called policies) can be used to control the power consumption levels of electronic systems, by setting their components in different states, each characterized by a performance level and a power consumption. In this paper, we describe power-managed systems using a finite-state, stochastic model. Furthermore, we show that the fundamental problem of finding an optimal policy which maximizes the average performance level of a system, subject to a ...

Keywords: emulation, functional simulation, reconstruction, visibility

6 Application-driven power management for mobile communication

Robin Kravets, P. Krishnan

July 2000 **Wireless Networks**, Volume 6 Issue 4

Full text available:  [pdf\(301.68 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Understanding distributed applications is a tedious and difficult task. Visualizations based on process-time diagrams are often used to obtain a better understanding of the execution of the application. The visualization tool we use is Poet, an event tracer developed at the University of Waterloo. However, these diagrams are often very complex and do not provide the user with the desired overview of the application. In our experience, such tools display repeated occurrences of non-trivial commun ...

7 Fast detection of communication patterns in distributed executions

Thomas Kunz, Michiel F. H. Seuren

November 1997 **Proceedings of the 1997 conference of the Centre for Advanced Studies on Collaborative research**


Full text available:  [pdf\(4.21 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Understanding distributed applications is a tedious and difficult task. Visualizations based on process-time diagrams are often used to obtain a better understanding of the execution of the application. The visualization tool we use is Poet, an event tracer developed at the University of Waterloo. However, these diagrams are often very complex and do not provide the user with the desired overview of the application. In our experience, such tools display repeated occurrences of non-trivial commun ...

8 Energy estimation tools for the Palm

Todd L. Cignetti, Kirill Komarov, Carla Schlatter Ellis

August 2000 **Proceedings of the 3rd ACM international workshop on Modeling, analysis and simulation of wireless and mobile systems**

Full text available:  [pdf\(1.04 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Reducing the energy consumed in the use of mobile and wireless devices is becoming a major design challenge. While the problem obviously must be addressed with improved low-level technology, we have advocated also considering a higher-level view in which energy management becomes an explicit design goal of the software developer who can be more aware of the needs of applications. In support of this objective, new programming

9 Fast power estimation for deterministic input streams

Luca Benini, Giovanni De Micheli, Enrico Macii, Massimo Poncino, Riccardo Scarsi

November 1997 **Proceedings of the 1997 IEEE/ACM international conference on Computer-aided design**

Full text available:  [pdf\(958.88 KB\)](#)

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The power dissipated by digital systems under realistic input stimuli is not accurately described by a single average value, but by a waveform that shows how power consumption varies over time as the system responds to the inputs. We face the problem of obtaining accurate power waveforms for combinational and sequential circuits under typical usage patterns. We propose a multi level simulation engine that achieves high accuracy in estimating the average power as well as the time domain power wav ...

Keywords: accurate power waveforms, average power, combinational circuits, computational efficiency, deterministic input streams, digital systems, fast power estimation, multi level simulation engine, power consumption, power dissipation, realistic input stimuli, sequential circuits, time domain power waveform, typical usage patterns

10 Fast transient power and noise estimation for VLSI circuits

Wolfgang T. Eisenmann, Helmut E. Graeb

November 1994 **Proceedings of the 1994 IEEE/ACM international conference on Computer-aided design**

Full text available:  [pdf\(603.33 KB\)](#)


Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Today's digital design systems are running out of steam, when it comes to meeting the challenges presented by simultaneous switching, power consumption and reliability constraints emerging in VLSI circuits. In this paper a new technique to accurately estimate the transient behavior of large CMOS cell-based circuits in a reasonable amount of time is presented. Gate-level simulations and a consistent modeling methodology are employed to compute the time-domain waveforms for signal voltages, su ...

11 Pen computing: a technology overview and a vision

André Meyer

July 1995 **ACM SIGCHI Bulletin**, Volume 27 Issue 3

Full text available:  [pdf\(5.14 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

This work gives an overview of a new technology that is attracting growing interest in public as well as in the computer industry itself. The visible difference from other technologies is in the use of a pen or pencil as the primary means of interaction between a user and a machine, picking up the familiar pen and paper interface metaphor. From this follows a set of consequences that will be analyzed and put into context with other emerging technologies and visions. Starting with a short historic ...

12 Technical reports

SIGACT News Staff

January 1980 **ACM SIGACT News**, Volume 12 Issue 1

Full text available:  [pdf\(5.28 MB\)](#)

Additional Information: [full citation](#)

13 New frontiers for system-level power management (invited talks): Battery-driven dynamic power management of portable systems

Luca Benini, Giuliano Castelli, Alberto Macii, Enrico Macii, Riccardo Scarsi

September 2000 **Proceedings of the 13th international symposium on System synthesis**

Full text available:  [pdf\(313.14 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

Battery life-time extension is a primary design objective for portable systems. Traditionally,

battery life-time has been prolonged mainly by reducing average power consumption of system components. A careful analysis of discharge characteristics and the adoption of accurate high-level battery models in system-level design open new opportunities for life-time extension. In this paper, we introduce dynamic power management (DPM) policies specifically tailored to battery-powered systems. Battery-d ...

14 Energy efficient design of portable wireless systems

Tajana Simunic, Haris Vikalo, Peter Glynn, Giovanni De Micheli

August 2000 **Proceedings of the 2000 international symposium on Low power electronics and design**

Full text available:  [pdf\(255.23 KB\)](#)


Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Portable wireless systems require long battery lifetime while still delivering high performance. The major contribution of this work is combining new it power management (PM) and it power control (PC) algorithms to trade off performance for power consumption at the system level in portable devices. First we present the formulation for the solution of the PM policy optimization based on renewal theory. Next we present the formulation for power control (PC) of ...

15 Recent developments in high-level synthesis

Youn-Long Lin

January 1997 **ACM Transactions on Design Automation of Electronic Systems (TODAES)**, Volume 2 Issue 1

Full text available:  [pdf\(232.47 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We survey recent developments in high level synthesis technology for VLSI design. The need for higher-level design automation tools are discussed first. We then describe some basic techniques for various subtasks of high-level synthesis. Techniques that have been proposed in the past few years (since 1994) for various subtasks of high-level synthesis are surveyed. We also survey some new synthesis objectives including testability, power efficiency, and reliability.

Keywords: VLSI design, design automation, design methodology, high level synthesis

16 Operating-system directed power reduction

Yung-Hsiang Lu, Luca Benini, Giovanni De Micheli

August 2000 **Proceedings of the 2000 international symposium on Low power electronics and design**

Full text available:  [pdf\(156.43 KB\)](#)


Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

this paper presents a new approach for power reduction by taking a global, software-centric view. It analyzes the sources of power consumption: tasks that require services from hardware components. When a component is not used by any task, it can enter a sleeping state to save power. Operating systems have detailed information about tasks; therefore, OS is the best place for identifying hardware idleness and shutting down unused components. We implement this technique in Linux and show that ...

17 Elastic time

Sudhir Srinivasan, Paul F. Reynolds

April 1998 **ACM Transactions on Modeling and Computer Simulation (TOMACS)**, Volume 8 Issue 2

Full text available:  [pdf\(582.40 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We introduce a new class of synchronization protocols for parallel discrete event simulation, those based on near-perfect state information (NPSI). NPSI protocols are adaptive dynamically controlling the rate at which processes constituting a parallel simulation proceed with the goal of completing a simulation efficiently. We show by analysis that a class of adaptive protocols (that includes NPSI and several others) can both arbitrarily outperform and be arbitrarily outperformed ...

Keywords: adaptive protocols, aggressiveness, near-perfect state information, optimistic protocols, risk

18 SensorSim: a simulation framework for sensor networks

Sung Park, Andreas Savvides, Mani B. Srivastava

August 2000 **Proceedings of the 3rd ACM international workshop on Modeling, analysis and simulation of wireless and mobile systems**

Full text available:  [pdf\(1.04 MB\)](#)


Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The advent of wireless micro sensors promises many yet unrealized benefits. A network of such sensors or "sensor network" introduces a new set of challenges. Besides being able to communicate effectively, sensor networks have demanding sensing tasks. First, they must be aware of their environment and oftentimes are required to adapt to their surroundings. Second, they must coordinate among them to perform a greater group-sensing task. In this context, the study of sensor network ...

19 Supercomputing and transputers

Falk Langhammer, Francis Wray

August 1992 **Proceedings of the 6th international conference on Supercomputing**

Full text available:  [pdf\(1.72 MB\)](#)


Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

It will be studied which degree parallel supercomputers can be scaled to. Necessary measures to achieve a maximum scalability will be discussed, and a case-study be presented. To this purpose, a new class of "supermassively parallel architectures" is introduced, and the notation of scalable architectures will be extended to reflect the impact of technological progress onto cost-functions. For systems in this class, the performance efficiency of applications is discussed and two ...

20 Gradual removals in cellular PCS with constrained power control and noise

Michael Andersin, Zvi Rosberg, Jens Zander

March 1996 **Wireless Networks**, Volume 2 Issue 1

Full text available:  [pdf\(2.04 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In this paper we study the mobile removal problem in a cellular PCS network where transmitter powers are constrained and controlled by a Distributed Constrained Power Control (DCPC) algorithm. Receivers are subject to non-negligible noise, and the DCPC attempts to bring each receiver's CIR above a given target. To evaluate feasibility and computational complexity, we assume a paradigm where radio bandwidth is scarce and inter-base station connection is fast. We show that finding the optimal ...

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